



## WLAN ACCESS POINT

Business WLAN Access Point

### bintec W2003n-ext



- Dual concurrent radio for simultaneous 2.4/5 GHz operation
- 802.11n 2x2 MIMO technology with up to 2x300 Mbps PHY rate
- 200 mW transmitter power at 5 GHz band
- Managed by integrated WLAN controller or stand-alone operation
- Two Gigabit Ethernet ports with PoE (Power over Ethernet)
- Four external RSMA antennas 2.4/5GHz
- Certified for operation in medical environments



# bintec W2003n-ext

## Business WLAN Access Point

The bintec W2003n-ext is an 11n access point with two dual-band radio modules with external antennas, allowing simultaneous operation in both the 2.4 GHz and 5 GHz bands. A high-performance radio module enables up to 200 mW transm. power at 5 GHz band.

### Product description

The device is equipped with external dual-band antennas. This makes it possible to operate both radio modules on the same frequency, e.g. two antennas operating at 2.4 GHz or two antennas at 5 GHz. The external antennas are removable, allowing you to operate the device with a separate omnidirectional, sector, or directional antenna.

Due to a high-performance radio module the W2003n-ext works with up to 200 mW transmission power at the 5 GHz band. This is a duplication of the transmission power compared to the 2.4 GHz band.

You can operate the bintec W2003n-ext access point in any of three different modes. You can operate the device as a stand-alone access point or manage it from a central bintec WLAN Controller. The W2003n-ext can also function as a WLAN Controller (master access point) itself to manage up to six APs. The bintec WLAN Controller solution can be used in wireless networks with anywhere from 2 to 150 access points. The bintec WLAN Controller solution provides a scalable, end-to-end solution that lets you expand your network without migrating to a new technology. This flexibility protects your investments in existing infrastructures.

The included mounting hardware lets you quickly and easily mount the unit onto a ceiling or wall. For protection against theft, the device is also compatible with Kensington locks. As an alternative to wall- or ceiling-mounting, you can also place the device on a desktop thanks to the included rubber feet.

Take advantage of all the benefits our optional bintec HotSpot solution has to offer when using the W2003n-ext as a stand-alone access point or together with the WLAN Controller software. Hotspots benefit hotels and restaurants, for instance, by allowing them to provide controlled wireless access to their customers.

The W2003n-ext also supports handover and roaming. That means with a properly set up and surveyed wireless network managed by a bintec WLAN Controller, wireless devices enjoy seamless coverage throughout the network. And seamless coverage is a must if you are, for instance, implementing a VoWLAN (Voice over WLAN) solution or using wireless barcode scanners for logistics applications.

The W2003n-ext. gives you green IT right out of the box with its automatic energy-saving features. If no client is connected, the AP turns off any circuits not currently in use, downshifting to mimo 1x1. The Gigabit Ethernet ports support the energy-saving 802.3az standard, ensuring only as much energy as needed is used.

### Variants

|                                       |  |
|---------------------------------------|--|
| <b>bintec W2003n-ext</b> (5510000325) | W2003-ext, WLAN Access Point with a dual concurrent radio module according 802.11abgn (2.4/5 GHz) Mimo 2x2, two Gigabit ETH, PoE, 4 ext. antennas, incl. wall/ceiling mounting, incl. WLAN Controller lic. for Master AP, shipm. Without 100-240V wall adapter |
|---------------------------------------|--|

## Features

| <b>Software</b>        |   |
|------------------------|---|
| Airtime Fairness       | Prevent performance limitation by slower or distant clients, which block the network  |
| Client Band Select     | Shifting of clients to 5 GHz band   |
| Client Management      | Client overload protection (to much clients) and shifting of clients to other APs, if threshold is reached.   |
| Roaming                | Seamless roaming with IAPP (Inter Access Point Protocol), support according 802.11r   |
| Buffer pool            | For cushioning of peaks   |
| WMM 802.11e QoS        | Data prioritization for TOS data, 802.11e/WMM   |
| WMM 802.11e power save | Support of active WLAN clients, which support 802.11e power save.   |
| U-APSD                 | Unscheduled Automatic Power Save Delivery: this functionality contributes significantly to raise battery life of Voice-over-WLAN end devices                  |
| Internet dialup        | PPPoE, PPTP (works at stand-alone operation or with WLAN controller, not at Master AP operation)  |
| NTP                    | NTP client, NTP server, manually (works at stand-alone operation or with WLAN controller, not at Master AP operation)   |
| DNS                    | DNS client, DNS server, DNS relay (works at stand-alone operation or with WLAN controller, not at Master AP operation)  |
| DHCP                   | DHCP client, DHCP server, DHCP relay (DHCP Server and DHCP Relay works at stand-alone operation or together with WLAN controller, not at Master AP operation) |
| HotSpot                | Requires a license. Works in WLC mode or in stand-alone operation, but not in Master-AP operation.  |

## Operation Modes

|      |  |
|------|--|
| WLAN | WLAN = Radio off; WLAN = Stand alone Access Point; WLAN = Managed Access Point; WLAN = Master Access Point for 6 APs |
|------|--|

## Wireless LAN (Radio 1)

|  |   |
|--|---|
| WLAN Standards                                   | 802.11b; 802.11g; 802.11n (Mimo 2x2) 2.4 GHz; 802.11a/h; 802.11n (Mimo 2x2) 5 GHz   |
| Receiver Sensitivity @ 2.4 GHz<br>802.11b/g      | 1 Mbps -95 dBm; 2 Mbps -95 dBm; 5,5 Mbps -93 dBm; 11 Mbps -92 dBm; 6 Mbps -95 dBm; 9 Mbps -94 dBm; 12 Mbps -93 dBm; 18 Mbps -91 dBm; 24 Mbps -87 dBm; 36 Mbps -84 dBm; 48 Mbps -83 dBm; 54 Mbps -81 dBm |
| Receiver Sensitivity @ 2.4 GHz<br>802.11n 20 MHz | MSC0/8 -95 dBm; MSC1/9 -93 dBm; MCS2/10 -92 dBm; MCS3/11 -88 dBm; MCS4/12 -85 dBm; MSC5/13 -82 dBm; MCS6/14 -80 dBm; MCS7/15 -78 dBm  |

## Wireless LAN (Radio 1)

|  |   |
|--|---|
| Receiver Sensitivity @ 2.4 GHz<br>802.11n 40 MHz | MSC0/8 -93 dBm; MSC1/9 -92 dBm; MCS2/10 -89 dBm; MCS3/11 -86 dBm; MCS4/12 -83 dBm;<br>MSC5/13 -81 dBm; MCS6/14 -78 dBm; MCS7/15 -76 dBm   |
| Receiver Sensitivity @ 5 GHz<br>802.11a/h        | 6 Mbps -94 dBm; 9 Mbps -93 dBm; 12 Mbps -92 dBm; 18 Mbps -90 dBm; 24 Mbps -88 dBm; 36 Mbps -85 dBm; 48 Mbps -82 dBm; 54 Mbps -80 dBm  |
| Receiver Sensitivity @ 5 GHz<br>802.11n 20 MHz   | MSC0/8 -94 dBm; MSC1/9 -92 dBm; MCS2/10 -91 dBm; MCS3/11 -87 dBm; MCS4/12 -84 dBm;<br>MSC5/13 -80 dBm; MCS6/14 -79 dBm; MCS7/15 -77 dB  |
| Receiver Sensitivity @ 5 GHz<br>802.11n 40 MHz   | MSC0/8 -92 dBm; MSC1/9 -90 dBm; MCS2/10 -88 dBm; MCS3/11 -85 dBm; MCS4/12 -82 dBm;<br>MSC5/13 -78 dBm; MCS6/14 -75 dBm; MCS7/15 -73 dB  |
| Tx Power @ 2.4 GHz 802.11b/g                     | 1 Mbps 14 dBm; 2 Mbps 14 dBm; 5.5 Mbps 14 dBm; 11 Mbps 14 dBm; 6 Mbps 17 dBm; 9 Mbps 17 dBm; 12 Mbps 17 dBm; 18 Mbps 17 dBm; 24 Mbps 17 dBm; 36 Mbps 17 dBm; 48 Mbps 16 dBm; 54 Mbps 16 dBm |
| Tx Power @ 2.4 GHz 802.11n 20 MHz                | MSC0/8 16 dBm; MSC1/9 16 dBm; MCS2/10 16 dBm; MCS3/11 16 dBm; MCS4/12 16 dBm; MSC5/13 16 dBm; MCS6/14 16 dBm; MCS7/15 15 dBm  |
| Tx Power @ 2.4 GHz 802.11n 40 MHz                | MSC0/8 15 dBm; MSC1/9 15 dBm; MCS2/10 15 dBm; MCS3/11 15 dBm; MCS4/12 15 dBm; MSC5/13 15 dBm; MCS6/14 15 dBm; MCS7/15 14 dBm  |
| Extended Performance Feature                     | Beamforming, MRC (Maximum Ratio Combining), Block-Acknowledgement   |
| Frequency bands 2.4 GHz indoor/outdoor (EU)      | 2.4 GHz Indoor/Outdoor (2412-2484 MHz) max. 100 mW EiRP (for Germany)   |
| Frequency bands 5 GHz indoor (EU)                | 5 GHz indoor (5150-5350 MHz) max. 200 mW EiRP allowed. This information is related to the permitted transmission power in Germany.  |
| Frequency bands 5 GHz outdoor (EU)               | 5 GHz outdoor (5470-5725 MHz) max. 1000 mW EiRP allowed. This information is related to the permitted transmission power in Germany.  |
| Data rates for 802.11b,g (2.4 GHz)               | 11, 5.5, 2 und 1 Mbps (DSSS modulation); 54, 48, 36, 24, 18, 12, 9 and 6 Mbps (OFDM modulation)   |
| Data rates for 802.11a,h (5 GHz)                 | 54, 48, 36, 24, 18, 12, 9 and 6 Mbps (OFDM modulation)  |
| Data rates for 802.11n, 20 MHz channel bandwidth | MSC0-15 allow up to 150 Mbps PHY rate at 20 MHz channel bandwidth, 2 streams, Short guard intervall   |
| Data rates for 802.11n, 40 MHz channel bandwidth | MSC0-15 allow up to 300 Mbps PHY rate at 40 MHz channel bandwidth, 2 streams, Short guard intervall   |
| Output power limitation (without antenna gain)   | Adjustable in following steps: 5, 8, 11, 14, 16 dBm and maximum. Maximal power varies depending on data rate, frequency band and country setting.   |
| Output power @ 2.4 GHz                           | Max. 20dBm  |
| Output power @ 5 GHz                             | 23 dBm  |
| Automatic Rate Selection (ARS)                   | Available   |
| Transmission rate                                | Automatic   |
| Number of spatial streams (802.11n)              | 1 or 2  |
| Bandwidth (802.11n)                              | 20/40 MHz (bundling of two adjoining 20 MHz channels to one 40 MHz channel)   |
| Short guard interval (802.11n)                   | On/off switchable; increase of throughput by reduction of the guard intervals from 800ns to 400ns   |

## Wireless LAN (Radio 1)

|                              |   |
|------------------------------|---|
| DTIM Period                  | Adjustable  |
| Multi SSID                   | Up to 8 service sets per radio module, with virtual access points and own MAC address per SSID                |
| Broadcast SSID               | On/off switchable   |
| Power management for clients | Registering of up to 250 clients per radio module simultaneously in access point mode. Default is 32 clients. |
| Country-specific settings    | Channel settings according regulatory domain (802.11d) permitted  |
| RTS/CTS                      | RTS/CTS threshold adjustable  |

## Wireless LAN (Radio 2)

|  |  |
|--|--|
| WLAN Standards                                   | 802.11b; 802.11g; 802.11n (Mimo 2x2) 2.4 GHzM; 802.11a/h; 802.11n (Mimo 2x2) 5 GHz   |
| Receiver Sensitivity @ 5 GHz 802.11a/h           | 6 Mbps -94 dBm; 9 Mbps -93 dBm; 12 Mbps -92 dBm; 18 Mbps -90 dBm; 24 Mbps -88 dBm; 36 Mbps -85 dBm; 48 Mbps -82 dBm; 54 Mbps -80 dBm   |
| Receiver Sensitivity @ 5 GHz 802.11n 20 MHz      | MSC0/8 -94 dBm; MSC1/9 -92 dBm; MCS2/10 -91 dBm; MCS3/11 -87 dBm; MCS4/12 -84 dBm; MCS5/13 -80 dBm; MCS6/14 -79 dBm; MCS7/15 -77 dB  |
| Receiver Sensitivity @ 5 GHz 802.11n 40 MHz      | MSC0/8 -92 dBm; MSC1/9 -90 dBm; MCS2/10 -88 dBm; MCS3/11 -85 dBm; MCS4/12 -82 dBm; MCS5/13 -78 dBm; MCS6/14 -75 dBm; MCS7/15 -73 dB  |
| Tx Power @ 5 GHz 802.11a/h                       | MSC0/8 17 dBm; MSC1/9 17 dBm; MCS2/10 17 dBm; MCS3/11 17 dBm; MCS4/12 17 dBm; MCS5/14 16 dBm; MCS6/14 15 dBm; MCS7/15 13 dBm   |
| Tx Power @ 5 GHz 802.11n 20 MHz                  | MSC0/8 17 dBm; MSC1/9 17 dBm; MCS2/10 17 dBm; MCS3/11 17 dBm; MCS4/12 17 dBm; MCS5/14 16 dBm; MCS6/14 15 dBm; MCS7/15 13 dBm   |
| Tx Power @ 5 GHz 802.11n 40 MHz                  | MSC0/8 17 dBm; MSC1/9 17 dBm; MCS2/10 17 dBm; MCS3/11 17 dBm; MCS4/12 17 dBm; MCS5/14 15 dBm; MCS6/14 14 dBm; MCS7/15 12 dBm   |
| Frequency bands 2.4 GHz indoor/outdoor (EU)      | 2.4 GHz Indoor/Outdoor (2412-2484 MHz) max. 100 mW EiRP (for Germany). The permitted transmission power may vary in other countries.   |
| Frequency bands 5 GHz indoor (EU)                | 5 GHz indoor (5150-5350 MHz) max. 200 mW EiRP allowed. This information is related to the permitted transmission power in Germany. The permitted transmission power may vary in other countries.   |
| Frequency bands 5 GHz outdoor (EU)               | 5 GHz outdoor (5470-5725 MHz) max. 1000 mW EiRP allowed. This information is related to the permitted transmission power in Germany. The permitted transmission power may vary in other countries. |
| Data rates for 802.11b,g (2.4 GHz)               | 11, 5.5, 2 und 1 Mbps (DSSS modulation); 54, 48, 36, 24, 18, 12, 9 and 6 Mbps (OFDM modulation)  |
| Data rates for 802.11a,h (5 GHz)                 | 54, 48, 36, 24, 18, 12, 9 and 6 Mbps (OFDM modulation)   |
| Data rates for 802.11n, 20 MHz channel bandwidth | MSC0-15 allow up to 150 Mbps PHY rate at 20 MHz channel bandwidth, 2 streams, Short guard intervall  |
| Data rates for 802.11n, 40 MHz channel bandwidth | MSC0-15 allow up to 300 Mbps PHY rate at 40 MHz channel bandwidth, 2 streams, Short guard intervall  |

## Wireless LAN (Radio 2)

|  |   |
|--|---|
| Receiver Sensitivity @ 2.4 GHz<br>802.11b/g      | 1 Mbps -95 dBm; 2 Mbps -95 dBm; 5,5 Mbps -93 dBm; 11 Mbps -92 dBm; 6 Mbps -95 dBm; 9 Mbps -94 dBm; 12 Mbps -93 dBm; 18 Mbps -91 dBm; 24 Mbps -87 dBm; 36 Mbps -84 dBm; 48 Mbps -83 dBm; 54 Mbps -81 dBm |
| Receiver Sensitivity @ 2.4 GHz<br>802.11n 20 MHz | MSC0/8 -95 dBm; MSC1/9 -93 dBm; MCS2/10 -92 dBm; MCS3/11 -88 dBm; MCS4/12 -85 dBm; MSC5/13 -82 dBm; MCS6/14 -80 dBm; MCS7/15 -78 dBm  |
| Receiver Sensitivity @ 2.4 GHz<br>802.11n 40 MHz | MSC0/8 -93 dBm; MSC1/9 -92 dBm; MCS2/10 -89 dBm; MCS3/11 -86 dBm; MCS4/12 -83 dBm; MSC5/13 -81 dBm; MCS6/14 -78 dBm; MCS7/15 -76 dBm  |
| Output power limitation (without antenna gain)   | Adjustable in following steps: 5, 8,11,14,16 dBm and maximum. Maximal power varies depending on data rate, frequency band and country setting.  |
| Output power @ 2.4 GHz                           | Max. 20dBm (100mW EiRP)   |
| Output power @ 5 GHz                             | Max. 23 dBm (200mW EiRP)  |
| Automatic Rate Selection (ARS)                   | Available   |
| Transmission rate                                | Automatic   |
| Number of spatial streams<br>(802.11n)           | 1 or 2  |
| Bandwidth (802.11n)                              | 20/40 MHz (bundling of two adjoining 20 MHz channels to one 40 MHz channel)   |
| Short guard interval (802.11n)                   | On/off switchable; increase of throughput by reduction of the guard intervals from 800ns to 400ns   |
| DTIM Period                                      | Adjustable  |
| Extended Performance Feature                     | Beamforming, MRC (Maximum Ratio Combining), Block-Acknowlegde   |
| Multi SSID                                       | Up to 8 service sets per radio module, with virtual access points and own MAC address per SSID.   |
| Broadcast SSID                                   | On/off switchable   |
| Power management for clients                     | Registering of up to 250 clients per radio module simultaneously in access point mode. Default is 32 clients.   |
| Country-specific settings                        | Channel settings according regulatory domain (802.11d) permitted.   |
| RTS/CTS  | RTS/CTS threshold adjustable  |

## Security

|  |   |
|--|---|
| Encryption WEP/WPA                         | WEP64 (40 Bit key), WEP128 (104 Bit key), WPA personal, WPA enterprise, WPA2 personal, WPA2 enterprise  |
| IEEE802.11i authentication and encryption  | 802.1x/EAP-MD5, 802.1x/EAP-TLS, 802.1x/EAP-TTLS, 802.1x/EAP-PEAP, key management, PSK/TKIP encryption, AES encryption, 802.1x/EAP   |
| Access control list (ACL)                  | MAC address filter for WLAN clients (white list) and dynamic and static blacklist. Black list function requires WLAN Controller   |
| WIDS (Wireless Intrution Detection System) | Rogue AP detection: detect foreign Aps, which try to spy out data via SSIDs by permanent background scanning. This functionality requires WLAN Controller.  |
| WIDS (Wireless Intrution Detection System) | Rogue Client Detection: detection and protection: detect conspicuous clients, which try to intrude or interfere the wireless network. In threat case blocking by dynamic black list. This functionality requires WLAN Controller. |

## Security

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| WIDS (Wireless Intrusion Detection System) | Neighbor AP Detection: detection of neighbor Ap's with possible influence on performance of own network. By detected intrusion: SNMP trap or email alert. This functionality requires WLAN Controller. |
| VLAN                                       | Network segments on layer2 possible. Per SSID one VLAN ID available. Static VLAN configuration according IEEE 802.1q; up to 32 VLANs supported.  |
| Inter cell repeating                       | Inter traffic blocking for public HotSpot (PHS) applications for preventing of communication radio client to radio client in a single radio cell.  |
| NAT/PAT                                    | Network & Port Address Translation / Stateful Packet Inspection: Isolation of complete network from public access  |

## Energy Saving Functions

|                     |   |
|---------------------|---|
| Mimo 1x1 shift down | The radio modules switching automatic to Mimo 1x1 operation, when no client is connected  |
| 802.3az support     | The ethernet interfaces reduce the power consumption automatically, in case that no device is connected. In the case of the usage of a short ethernet cable, the circuit reduce the transmit power. |
| LED Mode            | The LEDs has three operation mode: Status, Flashing, Off  |

## Maintenance

|                                 |   |
|---------------------------------|---|
| Configuration a. maintenance:   |   |
| Configuration a. maintenance:   | Telnet, SSH, HTTP, HTTPS, SNMP  |
| Device configuration via        |   |
| Configuration a. maintenance:   | SNMP (v1, v2, v3), USM model, VACM views, SNMP traps (v1, v2, v3) configurable, SNMP IP access list configurable  |
| Configuration a. maintenance:   | Complete management with MIB-II, MIB 802.11, enterprise MIB   |
| SNMP configuration              |   |
| Configuration a. maintenance:   | Supports SSH V1.5 and SSH V2.0, for secure connections of terminal applications   |
| SSH Login                       |   |
| Configuration a. maintenance:   | Web-based configuration (FCI). The user interface is identical with almost all Teldat products.   |
| HTTP/HTTPS                      |   |
| Configuration a. maintenance:   | SSH available, HTTPS, Telnet protected against 'bruce force attacks'  |
| Secure configuration            |   |
| Configuration a. maintenance:   | Load and save of configurations; save configuration optionally encrypted; optional, automatic controlled via scheduler                                  |
| Configuration export and import |   |
| Configuration a. maintenance:   | No restart is required after the configuration has been changed.  |
| On the fly configuration        |   |
| Configuration a. maintenance:   | Software updates free of charge; loadable via file, HTTP or via direct access to the Teldat upload server; optional, automatic controlled via scheduler |
| Software update                 |   |
| External Reporting:             |   |
| External reporting: Syslog      | Syslog client, with different levels of messaging   |

## Maintenance

|  |   |
|--|---|
| External reporting: eMail alert                      | Automatic eMail alert by definable events (predefined events: new neighbor AP found, new rogue AP found, new slave AP found, managed AP failed)   |
| External reporting: SNMP traps                       | Supported   |
| Monitoring:  |   |
| Monitoring: Internal Log                             | Output via web-based configuration interface (http/https); filter: subsystem, level, message  |
| Monitoring: Interfaces                               | Statistic information of all physical and logical interfaces  |
| Monitoring: WLAN                                     | Detailed displays for radio, VSS. Displayed are per link: MAC address, IP address, TX packets, RX packets, signal strength for every receiving aerial, signal-to-noise ratio, data rate   |
| Monitoring: Configurable scheduler (standalone AP)   | In the operation mode 'standalone AP' the following events can be scheduled: Reboot device, activate/deactivate interface, activate/deactivate WLAN SSID, initiate 5 GHz band scan, trigger SW update, trigger configuration backup |
| Monitoring: Configurable scheduler (WLAN Controller) | In the operation mode 'WLAN Controller' the following events can be scheduled: Activate/deactivate WLAN SSID, initiate Neighbor band scan   |
| Management: Supported management systems             | WLAN Controller, DIME Manager, XAdmin   |
| Management: Discovery Protocol                       | CAPWAP DHCP option according RFC1517  |
| Management: WLAN Controller functionality            | Can act as stand-alone AP without WLAN controller; can act for small installation with up to 6 AP as WTP-AC (Master AP); can act as WTP (Managed by a WLAN Controller)  |
| Documentation  | German and English documentation on CD and in the Internet for download   |
| Guarantee  | 2-year manufacturer's guarantee, online RMA handling  |

## Hardware

|                              |   |
|------------------------------|---|
| Standards and certifications | R&TTE Directive 1999/5/EG; EN 60950-1 (IEC60950); EN 300 328; EN 301 489-17; EN 301 489-1; EN 301 893; EN 60601-1-2 (medical electrical devices - Part 1-2) |
| LAN / WAN                    | 2 x 10/100/1000 Mbps Ethernet twisted pair, autosensing, auto MDI/MDI-X   |
| WLAN                         | Two independent high-performance radio modules IEEE 802.11abgn Mimo 2x2 for operation at 2.4 (100 mW) and 5 GHz (200 mW)                                    |
| Antenna                      | Two external antenna with Omni characteristic for each radio module, RSMA socket, approx. 1,5 dBm gain  |
| Real time clock              | Even at power loss the system time will be available for several hours.   |
| Power supply                 | External wall power supply 230V / 9V DC, 1,3A, with high efficient switching power supply (The wall adapter is a accessory and not include the shipment).   |
| PoE                          | Power-over-Ethernet according IEEE 802.3af, compatible with 802.3at PoE injectors   |
| Status LEDs                  | Status, Activity for WLAN1, WLAN2 and Ethernet  |
| Wall and ceiling mounting    | Include the package   |
| Desktop operation            | Possible, rubber pad included the package   |
| Theft protection             | Theft protection integrated, Kensington ® compatibel  |
| Dimensions                   | Approx. 15.9 cm x 14.5 cm x 4.3 cm (width x depth x height)   |

## Hardware

|                   |  |
|-------------------|--|
| Power consumption | < 8.7 Watt   |
| Environment       | Temperature operating: 0°C to 40°C; storage: -10°C to 70°C; rel. humidity 10 to 95% (non condensing) |

## Accessoires

### Pick-up Service / Warranty Extension

|   |  |
|---|--|
| <b>Service Package 'small'</b> (5500000810) | Warranty extension of 3 years to a total of 5 years, including advanced replacement for Teldat products of the category 'small'. Please find a detailed description as well as an overview of the categories on <a href="http://www.teldat.de/servicepackages">www.teldat.de/servicepackages</a> . |
|---|--|

## Antennas

|   |   |
|---|---|
| <b>ANT-RSMA.STD-2+5G white</b> (5500001349) | Standard Dual-band antenna (2.4/5GHz) with RSMA connector for W2003n-ext in white |
|---|---|

## Add-ons

|   |   |
|---|---|
| <b>PS-EURO-Wx003n/Wx004n</b> (5500001254)       | Wall power supply with EU-plug for W1003n, W2003n, W2003n-ext, W2004n   |
| <b>Wall mounting for Wx003n/4n</b> (5500001278) | Wall and ceiling mounting (spare part) for W1003n, W2003n, W2003n-ext, W2004n   |
| <b>Gigabit PoE Injector</b> (5530000082)        | PoE Injector for LAN 10/100/1000 Mbps, 100-240V, EU plug, output 48V/0.35A; suitable for Access Points, IP phones, etc. |